Service Description: Cisco Datacenter Remote Management Services

Technology Addendum to Cisco Remote Management Services Common Service Description

This document referred to as a Technology Addendum describes the Cisco Datacenter Remote Management Services.

Related Documents: This document should be read in conjunction with the following documents also posted at www.cisco.com/go/servicedescriptions/: (1) Cisco Remote Management Services RMS Common Service Description (“RMS Common Service Description”); (2) Glossary of Terms; (3) List of Services Not Covered.

Direct Sale from Cisco

If you have purchased these Services directly from Cisco, this document is incorporated into your Master Services Agreement (MSA), Advanced Services Agreement (ASA), or equivalent services agreement executed between you and Cisco. If not already covered in your MSA or equivalent services agreement, this document should be read in conjunction with the Related Documents identified above. In the event of a conflict between this Service Description and your MSA or equivalent services agreement, this Service Description shall govern.

Sale via Cisco Authorized Reseller

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Service Summary

Cisco Datacenter Remote Management Services are intended to supplement a current support agreement for Cisco products, and only available where all the Datacenter and Application Delivery Managed Components in a Customer’s network are supported through a minimum of core services such as Cisco’s SMARTnet and Software Subscription Services, as applicable. Cisco shall provide the Cisco Datacenter Remote Management Services described below as selected and detailed on the Purchase Order for which Cisco has been paid the appropriate fee.

Cisco shall provide a Quote for Services (“Quote”) setting out the extent of the Services and duration that Cisco shall provide such Services. Cisco shall receive a Purchase Order that references the Quote agreed between the parties and that, additionally, acknowledges and agrees to the terms contained therein.

Cisco Datacenter and Application Delivery Technologies Remote Management Service

The Service described below will act as additional or clarifying definition to detail contained within the RMS Common Service Description.

Cisco Datacenter and application delivery Remote Monitoring and Management Services provides remote network monitoring and management support for Datacenter and Application Delivery devices within the Customer’s infrastructure.

This Technology Addendum describes the services capabilities, supported devices, elective changes, and reports delivered with Cisco Datacenter Remote Management Services. The primary distinction between the Managed service and the Monitoring service is the addition of proactive analysis and remediation of event traffic by Cisco’s Operations Center personnel. This addition provides Customer with the 24/7 event analysis, proactive and reactive configuration changes as well as device tuning. The services support all of the primary Cisco Datacenter and Application Delivery technologies; A list of all supported devices is included in Section 2.4.

1. Service Levels

The Cisco Datacenter and Application Delivery Remote Management Services are offered in two service levels:

- Monitoring Service
**Managed Service**

These service levels are described in detail in the RMS Common Service Description. In addition to these two service levels, the Customer can also purchase **Optional** services as needed to augment their Cisco Datacenter and Application Delivery Remote Management Services. The table below outlines the activities and deliverables that are covered under the two service levels and Optional Services for the Cisco Datacenter and Application Delivery Remote Management Services.

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<th>Activities / Deliverables</th>
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<th>Managed Service</th>
<th>Optional Services</th>
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<td>Customer Engineer Level II Option</td>
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<td></td>
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<td>Elective Changes</td>
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</table>
2. Reporting

The Cisco Management Application Platform ("MAP") collects and gathers log and event information from the Datacenter Components covered within the service. This information is compiled and made available via reports available on the RMS portal. Standard reports available are listed below.

- **Server Performance Summary** - percentage utilization for CPU/memory usage/sensors/traffic/reachability
- **Server Asset Details** – Manufacturer, Model #, O/S, memory stats,
- **CPU Report** – performance
- **File System Service** – Details on each logical volume
- **Server Performance Details** – Details on CPU, disk, memory and traffic
- **Virtualization Infrastructure** –
- **VM Health report** – Health and availability by VM, CPU and memory
- **VM Top utilization** – Resource utilization


### Server Asset Details Report
Reports listing identification information on all managed servers
- Server Name
- Model
- Manufacturer
- Operating system
- Operating system revision
- Total Random Access Memory
- Percent of memory used
- Amount of RAM available
- Total virtual memory
- Percent of virtual memory used
- Amount of virtual memory available

### Server CPU Report
Reports listing the following information for each server under management:
- CPU type
- CPU speed
- CPU number
- CPU utilization
- CPU load

### File Service Performance Details Report
Reports listing the following information for each logical storage volume under management:
- Server Operating System
- Volume name (logical partition)
- Volume size
- Percent of volume used
- Amount of volume available

### Server Performance Report
Reports showing:
- Real time, daily, weekly, and monthly graphs
- CPU utilization, memory utilization, traffic in and out, and file system (disk) utilization and file system (disk) availability

### Modular Server Performance
Tabular report giving real-time daily, weekly, and monthly view
• Includes CPU utilization, memory utilization, traffic in/out, and number of active processes with sums for each of the columns

Cisco Sensor
Examples include voltage level, voltage status, fan state, power supply state, temperature level, temperature status

Device ICMP
Examples include ICMP messages received (per second), ICMP messages sent (per second), ping replies received (per second), ping replies sent (per second), pings sent (per second), ping replies received (per second)

Device IP Statistics
Examples include IP packets received (per second), IP packets forwarded (per second), IP out requests (per second), no route (per second), fragmentation failures (per second), reassembly failures (per second)

Interface Volume Health
Examples include inbound volume (octets), outbound volume (octets), inbound errors, outbound errors, unknown protocols

Interface Error Discards
Examples include delivered (inbound) packets, inbound errors, inbound discards, outbound errors, outbound discards

Interface Throughput Utilization
Examples include inbound utilization (percent), outbound utilization (percent), inbound throughput (bps), outbound throughput (bps)

Frame Relay Throughput or Errors
Examples include inbound throughput (bps), outbound throughput (bps), inbound or outbound volumes, inbound outbound FECN/BECN, discard priority and availability (percent)

Interface LAN Errors
Examples include inbound abort, inbound CRC, inbound frame, inbound giants, inbound ignored, inbound overrun

Interface Multicast
Examples include inbound unicast packets per second, outbound unicast packets per second, inbound multicast packets per second, outbound multicast packets per second, inbound broadcast packets per second, outbound broadcast packets per second

Interface DS1 and DS3
Examples include errors per second, unavailable seconds, severe errors per second, severe error frame seconds

Device ICMP

3. Supported Device List

The following product types are supported as part of the Cisco Datacenter RMS Service. For a detailed list of products, http://www.cisco.com/en/US/products/ps6192/serv_datasheets_list.html

Wireless
• WAAS/WAE
• WAAS/NME/ACNS
• WAAS Central Manager/Mobile server
• ACE/NME/Appliance/AXG
• GSS/CSS
• 6500/7600 Router
• ISR 1800/2800/3800

UCS
• Cisco UCS B series blade server
• Cisco UCS C series rack server
• Cisco Fabric Interconnect 6120/6140
• UCSM (Unified Compute System Manager)
• Emulex/Qlogic Converged Network Adapter

**Operating Systems**

• Microsoft Windows Server 2003/2008
• Red Hat Linux 5.X
• Vmware ESXi 4.X
• HyperV
• vSphere

**Storage Systems**

• EMC – AX, NS-120, VNX, Symmetrix
• NetApp - FAS 32XX, 62XX
• Cisco MDS Storage switches
• Brocade 100,200,300 series

3.1. Defined Changes

Defined Changes are categorized into Small, Medium, and Large activities. A Defined Change is a requested change by the Customer. Defined Changes are not the result of Cisco Incident Management and Problem Management processes. The Customer identifies the needed type of change and submits a Defined Change Request on the Portal.

**Small Defined Change (Type 1)**

• Add configure, change VM resources
• Administration user accounts
• VLAN access point changes

**Medium Defined Change (Type 4)**

• Apply Application patches
• Configure new VM
• Deploy new VM from standard template
• Manage new Hypervisor

**Large Defined Change (Type 8)**

• Upgrade new Hypervisor
• Upgrade new OS
• Apply Cisco managed application upgrade
• Upgrade UCSM firmware/software
• Manage Circuit changes

3.2. Custom Scoped Elective Changes

Custom Scoped Elective Changes are Customer requested changes that fall outside Incident and Problem (Standard) changes for restoring service. Custom Scoped Elective changes will require a mutually agreed upon statement of work (SOW). See RMS Common Service Description for more details of Custom Scoped Elective Change support. Some examples of Custom Scoped Elective Change activities are listed below.

• Apply license updates and changes
• Track & report on software license usage
• Packet capture and traffic analysis
• Device mapping and packet flow monitoring
• SNMP and non-SNMP-based administration
• Network Carrier Coordination - Coordination of Service Engagement
• Patches to Cisco equipment and Cisco applications